



Opening remarks

by Már Guðmundsson, Governor of the Central Bank of Iceland.
Capital Flows, Systemic Risk and Policy Responses, Reykjavík, 28 April 2016.

Dear colleagues,

I would like to welcome many of you to Iceland and all of you to this conference that we have given the title *Capital flows, systemic risk, and policy responses* (see [programme](#)). It is organised jointly by the Central Bank of Iceland, the Systemic Risk Centre at the London School of Economics, and the International Monetary Fund. The list of those that have helped to make this event possible by making sure that we had the necessary programme, speakers, participants and facilities is too long for these opening remarks. But I would like to thank them all very much for their efforts.

However, I cannot escape mentioning five names. Jón Daníelsson, Director of the Systemic Risk Centre at the London School of Economics, and Sigríður Benediktsdóttir, Director of the Financial Stability Department of the Central Bank of Iceland, came up with the original idea for this conference about a year ago. On behalf of the Central Bank of Iceland, Sigríður was also the key organiser of the programme, along with Katja Neugebauer and Ann Law from the Systemic Risk Centre at the London School of Economics and Marco Arena from the International Monetary Fund.

The conference is in two parts. Today and until lunch tomorrow, we will be here at Hotel Hilton Reykjavík Nordica. We begin by hearing a keynote address by Stijn Claessens, whom I will introduce shortly. We will then discuss twelve submitted papers. We clearly picked a hot topic, as we received 150 submissions, including at least 100 that were deemed highly relevant to the topic of the conference. I look forward to hearing the selections. Finally, we will have a special policy and case study session just before lunch tomorrow, where you will also learn about Iceland's experience with volatile capital flows.

After lunch tomorrow, we move over to Harpa, the new conference and music centre on the Reykjavík seafront and in front of the Central Bank. We move the latter part of conference to Harpa not only because many Icelanders nowadays feel that our visitors have a duty to see that magnificent place. We will have more space and the audience will be larger. In addition, the proceedings from then on will be streamed on the websites of the IMF and the Central Bank of

Iceland (see webcast [here](#)). The location will remind us that there are also positive aspects to capital inflow surges!

After we convene at Harpa, we will first hear a keynote address by Maurice Obstfeld, Economic Counsellor of the International Monetary Fund. Then we will have a policy panel moderated by Jörg Decressin, Deputy Director of the European Department of the IMF, with two Governors, Karnit Flug from Israel and myself, Turalay Kenc, Deputy Governor of the Central Bank of Turkey, Luiz A. Pereira da Silva, Deputy General Manager of the BIS and former Deputy Governor in Brazil, and Professor Carmen Reinhart from the Harvard Kennedy School. Jón Daniélsson will then make the closing remarks.

In addition, let me recognise one more person on the programme, who is Charles Goodhart. He needs no introduction to you, of course. Charles was initially scheduled to be on the panel, but because he has now to leave early on Friday, that is no longer possible. Instead, he offered lead the discussion in one of the paper sessions. Charles has been to Iceland several times. I remember that I met him first in the early 1990s, when he came to Iceland to talk about central bank independence and the new monetary framework in New Zealand, which we adopted many years later. But I also remember sharing a panel with him here in Iceland in 1998, when I was Chief Economist of the Central Bank of Iceland, at a conference organised by Jón Daniélsson and others. This was shortly after the Asian crisis had broken out and the international community had come to the conclusion that it was perhaps not such a good idea after all to incorporate free capital movements as a requirement into the Articles of Agreement of the IMF. I remember that we agreed that we were at a turning point, when policy views were shifting. And here we are again, but this time around it is perhaps more fundamental!

You see from this that we have a rich and varied two-day programme ahead of us – a programme that I, for one, am looking very much forward to.

Let me now use the rest of my time to reflect briefly on the topic. I will initially approach it from the monetary policy perspective, which is very much influenced by my role as a policy-maker in this country, which used to be very financially integrated with the rest of the world but has been behind comprehensive capital controls on outflows since the crisis. But it is also informed by my work and that of my colleagues on these issues when I was at the BIS during the prelude to the Great Financial Crisis (GFC).

Among the questions that we are faced with in this connection are the following:

1. How is the transmission mechanism of monetary policy affected in small, open economies with open capital accounts as global financial integration progresses?
2. What is the scope for independent monetary policy in that case?
3. What is the interaction with financial stability?
4. Does this state of affairs call for changes in policy frameworks and tools?

You know the theory. If we have a world made up of one very large country and several very small countries, have full cross-border financial integration (in the economic sense of these terms rather than the legal), and assume that relative risk premia are constant, then long-term interest rates in the small countries will be pegged to long-term rates in the large one. This, of course, is an “unrealistic” theoretical simplification. But it gives us a reference point to start to think about these issues, and it indicates the direction we might be heading in as global financial integration progresses.

In this type of world, the small countries could still have independent monetary policy of a sort, provided that they have a flexible exchange rate regime. They could pick their own inflation targets and set their own short-term rates that would affect economic activity in the short run and inflation in the long run. In this case, monetary policy works mostly through the exchange rate channel.

So why is this a problem? If exchange rates were smooth reflections of underlying fundamentals, then it would not need to be. The evidence suggests, however, that foreign exchange markets exhibit excess volatility and that exchange rates diverge from fundamentals for protracted periods. In some sense, the existence of carry trade can be construed as evidence of this, as it involves betting that interest rate differentials are not fully compensated by exchange rate movements; i.e., that uncovered interest rate parity does not hold, except at long horizons, and then often through sharp and disorderly corrections.

This, in turn, gives rise to two concerns: first, regarding detrimental effects on the traded goods sector (for example, New Zealand and Iceland prior to the crisis), and second, on financial stability where volatile capital flows, currency mismatches, and rollover risk of foreign currency debt are among the key players. Adverse effects on financial stability can be particularly severe when a blocked interest rate channel and an erratic exchange rate channel interact badly with other economic and financial risks that can face small, open, and financially integrated economies – such as the global credit cycle, domestic financial vulnerabilities, policy conflicts, and asymmetric shocks. This was the case in Iceland.

We saw trends before the GFC that are consistent with this story, although they could also be explained by common shocks and monetary policy credibility. The GFC reversed this process somewhat, as risk premia skyrocketed, cross-border banking retreated to home base, and restrictions on capital movements were in some cases reintroduced. But it has come back to a significant degree.

The bottom line is that it is becoming more difficult to conduct independent monetary policy in small, open, and financially integrated economies, and although a flexible exchange rate is a necessary condition for doing so, it might not be sufficient, especially when we factor in the financial stability aspects. This, I think, is why we find on occasion that we are closer to facing a dilemma than a trilemma.

What can be done about this, apart from giving up on the task of conducting independent monetary policy and entering a monetary union (with its own pros and cons, which I will not discuss here) or by making radical changes to the international monetary and financial systems that are not forthcoming any time soon?

In principle, there are three ways to mitigate the problem. The first is to adjust macroeconomic policy frameworks. The second is to use prudential regulation and supervision aimed at reducing potential vulnerabilities and increasing resilience in face of volatile capital flows. The third is to introduce tools aimed directly at the financial integration part in order to regain greater monetary independence and shift the effect of monetary policy more to the interest rate channel and towards the non-traded goods sector. These so-called capital flow management measures could, for instance, take the form of some type of reserve requirement or a tax that could complement appropriate macroeconomic policies by reducing the returns on portfolio investments of foreign residents, thus limiting the increase in the effective interest rate differential vis-à-vis abroad when domestic interest rates are raised.

In Iceland, this issue is very much on the agenda as the country prepares to lift the comprehensive controls on capital outflows that were introduced at the peak of its financial crisis. We will work through all of the avenues that I have just mentioned, and many of the reforms have already been implemented. What I call inflation targeting-plus will replace IT of the pre-crisis type. A managed float has already taken the place of the free float. Foreign exchange intervention without targeting a specific exchange rate level is thus used to reduce excess volatility in the FX market and lean against capital flow cycles. The financial stability framework has been strengthened, and macroprudential tools are being developed that are intended to mitigate adverse interactions between capital flows, on the one hand, and domestic credit growth and asset prices, on the other. Foreign currency borrowing by unhedged domestic agents will be very much restricted. Prudential limits on banks' FX balance sheets, in the form of specific LCR and NSFR in FX, have been imposed. In practice, this will greatly limit the size of their FX balance sheets and the associated maturity mismatch that was the proximate cause of the demise of the old banks that failed during the crisis. Finally, a tool to directly affect capital flows when the interest differential vis-à-vis abroad becomes sizeable is being contemplated. We know, however, that such a tool will be no panacea and should normally not be used as a first or even second line of defence. It will have side effects and might take us to the limits of international obligations, particularly if the tools are designed for maximum efficacy.

History will tell whether all of this will be sufficient to preserve monetary and financial stability in the rougher seas of freer capital movements that we intend to embark upon. In any case, although some of them were used in the more distant past, we have much to learn about how the additional tools now being contemplated around the world will work and how they should interact with

current tools. I see that many of the papers are indeed about various aspects of this issue.

Let me stop here and introduce Stijn Claessens and his keynote address to you, although he does not need much of an introduction to this group, having been Assistant Director of the Research Department of the IMF from 2007-2015 and currently a Senior Adviser to the Board of Governors of the Federal Reserve System. The title of his talk fits very well with the topic of this conference and some of the issues that I have just raised. It is Macroprudential, Monetary and Capital Flow Management Policies and Their Interactions.